REMARKS

Reconsideration and allowance in view of the foregoing amendment and the following remarks are respectfully requested. Claims 1, 6, 24, 27, 32, 35 and 40 are amended.

Rejection of Claims 3-6, 29-32 and 37-40 Under 35 U.S.C. §112

The Examiner rejects claims 3-6, 29-32 and 37-40 under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter. Applicants question the Examiner's rejection outlined in paragraph 4 of the Office Action regarding the term "bit value." The Examiner discusses the phrase "a frame of video data" in claims 3, 29 and 37 with reference to a frame being a bit value. However, the term "bit value" is not in the claims and Applicants request clarification as to why there is any confusion as to what is a frame of video data is.

Regarding claims 6, 32 and 40, Applicants have cleared up the antecedent basis issue via the amendments above to recite a high priority encoded video frame. This amendment does not narrow the scope of the claim. Withdrawal of the Section 112 rejections is requested.

Rejection of Claims 1-7, 24-33 and 35-41 Under 35 U.S.C. §103(a)

The Examiner rejects claims 1-7, 24-33 and 35-41 under 35 U.S.C. §103(a) as being unpatentable over Masaki et al. (U.S. Patent No. 6,359,309) ("Masaki et al.") and in view of Li (U.S. Patent No. 6,275,531) ("Li"). Applicants traverse this rejection and submit that these claims are patentable over the cited prior art. Applicants have amended claims 1, 24 and 35 to recite encoding an additional number of low priority frames but this amendment is not made for the purpose of adding a limitation to overcome the prior art or for patentability.

We first turn to claim 1 and address the teachings of the art and then we'll discuss the motivation to combine.

Claim 1 recites encoding a plurality of frames as either high priority frames or low priority frames, receiving information about loss of low priority frames by a network and, if more than a threshold amount of low priority frames are being lost, encoding an additional number of the low priority frames as high priority frames, wherein the additional high priority frames are encoded at a lower quality than is generally used for high priority frames. The Office Action asserts that Masaki et al. teach the last step regarding the threshold amount. Specifically, the Office Action cites col. 68, lines 12 – 59 and col. 82, line 40 – col. 83, line 45. Applicants submit that Masaki et al. fail to teach this limitation. Notably, in column 68, Masaki et al. teach two modes of operation, an error mode and an error free mode. Col. 67, lines 53 – 60. The difference in these modes causes an encoder to set a quantization step size with a quantization step size larger than the quantization step size set in the error free mode and in the error mode the encoder adds more error correcting code. Col. 67, lines 53 – 67. In other words, what Masaki et al. teach is an error mode in which a quantization step is changed such that the amount of video data is decreased and an error correcting code is increased.

With that background in mind, Masaki et al. further teach that a video frame is divided into a priority area associated with an object and a non-priority area such as background. We note that this is in contrast to claim 1 in which the frames themselves are encoded as high priority or low priority. This is one difference between claim 1 and Masaki et al.

Masaki et al. teach in the error mode is that the low-priority area of a frame is set to a quantization step size that is larger than the quantization step size determined in the third quantization control portion – and then it is sent to the coding device. In some cases, in the error mode, the non-priority area is not coded or transmitted at all. Col. 68, lines 24 – 59. The above

relates to the teaching about the quantization control device 41 of Masaki et al. We note that there is no teaching of encoding non-priority areas of the frame as priority areas of the frame in the error mode.

With regards to the frame dropping/quantization control device 42, Masaki et al. again teach dividing the video frame into priority and non-priority areas. When frame dropping takes place, the quantization step size for the non-priority area is set to a quantization step size that is larger than the quantization step size set in the first quantization control portion 163 and coded. The coding device 12 may be controlled not to perform coding or transmission at all for the non-priority areas. Another option taught is that when frame dropping takes place, that the control device 42 will enlarge the range of the non-priority area. Applicants note that neither device 41 nor 42 of Masaki et al. teach encoding lower priority frames as high priority frames if more than a threshold amount of lower priority frames are being lost. In fact, Masaki et al. teach away from this approach by teaching that in some cases the priority areas are changed to non-priority areas by virtue of enlarging the non-priority area of a frame (col. 68, lines 57 – 59) or by not coding or transmitting the non-priority areas at all.

Furthermore, since Masaki et al. do not teach encoding low priority frames as high priority frames if more than a threshold amount of low priority frames are being lost, then they also fail to teach that the additional high priority frames are encoded at a lower quality than is generally used for high quality frames. This feature is not taught or suggested by Masaki et al.

For these reasons, Applicants submit that Masaki et al. fail to teach the features asserted by the Office Action in independent claim 1 and its dependent claims 2-8. These claims are therefore patentable and in condition for allowance.

Similarly, claims 24, 27 and 35 and their respective dependent claims are also patentable and in condition for allowance for the same reasons set forth above.

Additional reasons exist for patentability. The Office Action on page 5 asserts that Li teaches encoding additional frames as high priority claims citing col. 3, lines 17 – 58. However, Li teaches no such feature. Lee teaches encoding a base layer and a number of enhancement layers and then transmitting those layers to a receiving device. The receiving device receives on M number of enhancement layers where N enhancement layers were generated. M is meant to be less than N. In other words, where there is a large demand on resources and bandwidth is limited, some of the enhancement layers are just dropped. "In the event that all of the enhancement layers cannot be transmitted the lower priority coded layers will be omitted." Col. 3, lines 23 – 25. Claim 1 recites that encoding the additional number of low priority frames as high priority frames is conditional upon if the threshold amount of low priority is being lost. In contrast, Li teaches initially generating all of the enhancement layers and then just dropping them as needed. There is no "if" requirement. Therefore, Li fails to teach encoding an additional number of low priority frames as high priority frames.

As can be seen, even if combined, these two references fail to teach the limitations of claim 1 and of each independent and thus dependent claim as well.

Applicants also traverse the obviousness combination of Masaki et al. with Li. As introduced above, Li is about generating N number of enhancement layers and then just omitting the various layers as necessary. Why would one of skill in the art look to the teachings of Li in view of Masaki et al.? Applicants that one of skill in the art would not be motivated or find a suggestion to look for these teachings of Li for several reasons. First, Masaki et al. already teach dropping non-priority areas in an error mode. Both devices 41 and 42 of Masaki et al. may "be controlled not to perform [the] coding operation and transmission operation." Col. 68, lines 34-36. Therefore, the teachings of Li regarding omitting an enhancement layer are redundant to Masaki et al. The Office Action further asserts that the benefit of the combination is that the

pictures still display but in lower quality due to the loss of one or more enhancement layer. However, this exact feature already exists in the teachings of the application of the quantization devices of Masaki et al. As noted above, when the quantization control is used in error mode, the amount of video data becomes less and thus the pictures display in lower quality. Col. 67, lines 53 – 67 of Masaki et al. Furthermore, dividing the video frame into non-priority and priority areas in Masaki et al. already provided the benefits articulated by the Office Action due to the addition of Li. Accordingly, Applicants submit that one of skill in the art would not be motivated to combine these references as it has been articulated by the Office Action. Therefoer, claims 1 – 7, 24 – 33 and 35 – 41 are patentable and in condition for allowance.

Rejection of Claims 8, 34 and 42 Under 35 U.S.C. §103(a)

The Examiner rejects claims 8, 34 and 42 under 35 U.S.C. §103(a) as being unpatentable over Masaki et al. and in view of Li as applied to claim 7, and further in view of Zhang et al. (U.S. Patent No. 6,816,194) ("Zhang et al."). Applicants traverse this rejection and submit that since the parent claims are patentable and since Masaki et al. should not be combined with Li as discussed above, that claims 8, 34 and 42 are patentable as well.

CONCLUSION

Having addressed all rejections and objections, Applicants respectfully submit that the subject application is in condition for allowance and a Notice to that effect is earnestly solicited. If necessary, the Commissioner for Patents is authorized to charge or credit the **Law Office of Thomas M. Isaacson**, **Account No. 502960** for any deficiency or overpayment.

Respectfully submitted,

Date: July 5, 2006

By: /Thomas M. Isaacson/

Thomas M. Isaacson

Attorney for Applicant
Reg. No. 44,166
Phone: 410-286-9405
Fax No.: 410-510-1433

Correspondence Address:
Thomas A. Restaino
Reg. No. 33,444
AT&T Corp.
Room 2A-207
One AT&T Way
Bedminster, NJ 07921